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Statement on behalf of the
United Mine Workers of America, AFL-CIO
Before the
Committee on Energy and Commerce
Energy and Environment Subcommittee
U.S. House of Representatives
April 23, 2009
"The American Clean Energy and Security Act of 2009"

Chairmen Waxman and Markey, Ranking Members Barton and Upton and distinguished members:

I am pleased to be here today to testify on behalf of the United Mine Workers of America (UMWA), the labor union representing the nation's organized coal miners. I have represented the UMWA in clean air and global climate change issues for more than 20 years, including participation as an NGO at all major United Nations climate negotiating sessions subsequent to the 1992 Rio Earth Summit. A copy of my bio is Attachment 1, and a summary of my statement is Attachment 2.

The American Clean Energy and Security Act (ACES) is comprehensive energy and environmental legislation, combining for the first time requirements for national renewable energy portfolio standards, a suite of energy efficiency

initiatives, and a national cap-and-trade program to reduce emissions of greenhouse gases. We are pleased to have the opportunity to comment on this proposed legislation, and will focus particularly on its cap-and-trade and carbon capture and storage provisions.

Background

The UMWA has sought technological solutions to the environmental challenges facing coal production and use for decades. The union fought, but ultimately lost, a 10-year legislative battle to require large coal-based generating plants to install available scrubber technologies to reduce their sulfur emissions. Due to fuel-switching to meet Title IV acid rain emission reductions, coal production in major eastern coal producing states declined by more than 113 million annual tons between 1990 and 2000. More than 30,000 coal mining jobs were lost. Dozens of mining communities have all but ceased to exist across economically-depressed Appalachia and the rural Midwest.

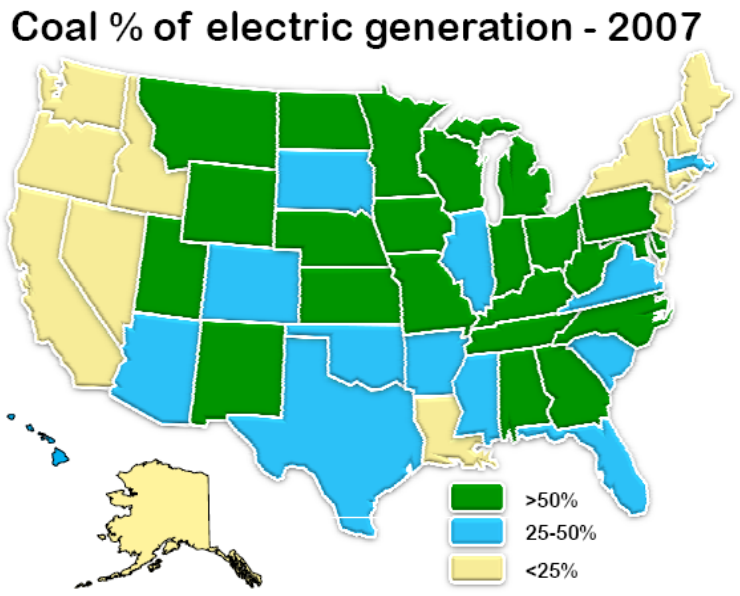
The UMWA recognizes that climate change legislation represents the greatest threat to its membership and to the continued use of coal. In July 2007, the UMWA, the AFL-CIO and other industrial unions endorsed the bipartisan Bingaman-Specter climate change bill (S.1766). That bill provided an appropriate balance of technology incentives, reasonable emission reduction targets and timetables, and safeguards for the economy. Achieving the proper balance among

technology incentives, the timing and stringency of emission reductions, and economic safeguards will be essential for obtaining broad bipartisan support for climate legislation.

The Role of Coal in America's Energy Supply

Coal is an indispensable part of America's energy supply. The U.S. has a demonstrated coal reserve base of over 500 billion tons, with an estimated 275 billion tons of recoverable reserves. Our recoverable reserves have the energy equivalent of one trillion barrels of oil, equal to world known oil reserves.

Approximately one-half of our electricity is generated by coal. Twenty three states rely on coal for more than half of their electric supplies, while another 12 states receive 25% to 50% of their electricity from coal (see map below).



Source: U.S. DOE/EIA, Electric Power Annual (2008)

Intermittent renewables such as wind cannot replace baseload coal generation, and usually are backed up with natural gas. To reduce coal in our energy supply mix means using another fuel to replace it for baseload generation, most likely a combination of nuclear and natural gas. Such a fundamental shift in U.S. energy policy would bring into question the cost and the availability of natural gas supplies. Substantial increases in demand for natural gas inevitably would lead to much higher electric generation costs, higher natural gas costs for consumers and industries, and greater dependence on foreign sources for supply. At the margin, our gas supplies will come from higher-cost unconventional reserves, and imports from Canada and unstable foreign markets in the form of LNG.

ACES Requires Comprehensive Economic Analyses

Due to its comprehensive nature and aggressive emission reduction and renewable energy and efficiency targets and timetables, ACES would impact virtually every aspect of energy supply and demand in this country. We look forward to U.S. DOE/EIA and other independent analyses of the economic and environmental impacts of this legislation, and hope that such studies will be available to guide the Committee's deliberations on this major bill.

There is much in this proposed legislation that UMWA supports, and our statement highlights these areas of agreement while outlining some suggested changes or improvements to the bill.

Support for Section 114

We strongly endorse the adoption, in Section 114, of HR 1689, the Carbon Capture and Storage Early Deployment Act reintroduced this year by Rep. Rick Boucher and a bipartisan group of cosponsors. The programs called for by this section will help to provide critical non-budget support for the early demonstration of CCS technologies on a commercial scale. Changes to the bill since its introduction in 2008 have enhanced the role of state public utility commissions, ensuring greater transparency and accountability.

HR 1689 is based on the unanimous recommendations of the U.S. EPA Advanced Coal Technology Work Group (ACT). In January 2008, U.S. EPA's ACT Work Group, representing a broad array of industry, state and environmental stakeholders, including the UMWA, unanimously recommended that Congress create a Carbon Capture and Storage Early Deployment Fund to defray the additional costs and risks of these technologies.

It is widely recognized that geological capture and storages of CO2 is the key to retaining domestic coal as a viable energy supply in the context of constrained U.S. greenhouse gas emissions. While various private and federal research programs are exploring the potential for carbon sequestration, a secure and adequate funding source is not available to accelerate essential applied research, development and commercial-scale demonstration of carbon capture and

storage as a viable commercial option for existing and future coal-based energy providers.

The 2007 MIT report, *The Future of Coal*, cautioned that:

> "Today, and independent of whatever carbon constraints may be chosen, the priority objective with respect to coal should be the successful large-scale demonstration of the technical, economic, and environmental performance of the technologies that make up all of the major components of a large-scale integrated CCS system — capture, transportation and storage. Such demonstrations are a prerequisite for broad deployment at gigatonne scale in response to the adoption of a future carbon mitigation policy, as well as for easing the trade-off between restraining emissions from fossil resource use and meeting the world's future energy needs." (*Id*., at xi.)

MIT also concluded that current funding for advancing CCS was "completely inadequate":

> At present government and private sector programs to implement on a timely basis the required large-scale integrated demonstrations to confirm the suitability of carbon sequestration are completely inadequate. If this deficiency is not remedied, the United States and other governments may find that they are prevented from implementing certain carbon control policies because the necessary work to regulate responsibly carbon sequestration has not been done. Thus, we believe high priority should be given to a program that will demonstrate CO2 sequestration at a scale of 1 million tonnes CO2 per year in several geologies. (*Id*., at xii.)

Section 114 is responsive to MIT's recommendations. CCS technologies are the only means for assuring that domestic coal can continue to supply a significant share of our electric generating needs in a carbon-constrained environment. As discussed below, the widespread deployment of CCS technologies also can provide

a major source of new, well-paying low-carbon jobs involving a broad range of skills.

The U.S. must take the lead in establishing the technical and commercial viability of CCS technologies for use both here and abroad. The world's ability to stabilize global CO_2 concentrations – the long-term goal of the U.N. Framework Convention on Climate Change - depends upon the willingness of major developing economies like India and China to accept meaningful commitments to reduce their future greenhouse emissions. These countries have vast coal reserves, and will continue to rely upon them to support their economic development.

Section 115 Commercial Deployment of CCS Technologies

The UMWA supports the objectives of the CCS commercial incentives provided in section 115 of ACES. A financial mechanism is needed to defray the incremental capital and operating costs of CCS technologies relative to units not employing carbon controls.

Section 115 currently depends on appropriated funds to be distributed by EPA in "tranches" to electric generating facilities meeting certain qualifications, in the form of payments per ton of CO2 captured and sequestered. The duration of this program and its potential scope are not yet defined.

The UMWA recommends that the Subcommittee develop an allowance-based mechanism for funding qualifying CCS facilities, similar to the bonus

allowance provisions of the Bingaman-Specter (S. 1766) or Warner-Lieberman (S. 2191) climate bills introduced in the 110th Congress. Appropriated funds cannot provide the security for financial planning that developers of multi-billion dollar projects require. Using bonus allowances (e.g., x tons of allowances per ton of CO2 captured and stored), or an alternative payment mechanism based on other allowance resources, will be critical to attracting capital investment in new and retrofit CCS applications. We agree with the principle established by Section 115 that larger payments should be awarded to projects achieving higher degrees of carbon capture and storage.

The timing of the availability of Section 115 support should be defined to provide planning certainty. The UMWA regards the first 20 years of the greenhouse gas reduction program as the most critical for avoiding a wholesale "dash to gas" as the principal utility compliance strategy. As an illustration, a program of commercial incentives operative from the first anticipated date of commercial operation of new or retrofit facilities – beyond the "first mover" projects to be supported by Section 114 – might be structured for the period 2020 to 2040. Beyond 2040, allowance prices alone should justify investments in CCS technologies.

Regarding the potential scope of Section 115 – how much capacity might be qualified to receive support – the Subcommittee should consider the potential

demand from both new and retrofit facilities. There is more than 300 Gigawatts of existing coal capacity across the nation. Many of the larger plants equipped with conventional pollution controls and located near carbon storage sites represent viable candidates for retrofit CCS controls. The demand for new coal plant applications also must be considered.

We recommend that the Subcommittee consult with U.S. DOE, the Electric Power Research Institute, and similar experts to assess the potential magnitude of demand for Section 115 support. For reference, U.S. EPA analyses of the Warner Lieberman and Bingaman Specter bills indicated that the bonus allowances and other incentives provided by these proposals would be sufficient to support the construction of approximately 65 Gigawatts and 100 Gigawatts of new Integrated Gasification Combined Cycle (IGCC) capacity equipped with CCS, respectively. EPA's analyses did not take into account the potential demand for CCS retrofits at existing plants.

Job and Other Economic Benefits from CCS Commercial Deployment

A February 2009 study by BBC Research & Consulting (BBC), "Employment and Other Economic Benefits from Advanced Coal Electric Generation with Carbon Capture and Storage Technologies," illustrates the employment and economic benefits that would result from deployment of CCS

technologies to reduce carbon dioxide emissions from the electric power sector.[1] The UMWA joined with the Industrial Union Council of the AFL-CIO, the International Brotherhood of Boilermakers, the International Brotherhood of Electrical Workers, and the American Coalition for Clean Coal Electricity to jointly sponsor this study to inform the discussion about the job and other economic benefits of CCS technologies.

The BBC study provides estimates, based on three legislative proposals, of the economic benefits that could result from development and operation of advanced coal-based generation facilities equipped with CCS. The study does not advocate any policy position on climate change, nor does it examine the potential adverse economic impacts of climate change legislation on the overall coal or electric generation industries, or on other industries and economic sectors.

The BBC study builds on U.S. EPA analyses of the Lieberman-Warner (S. 2191) and Bingaman-Specter (S. 1766) bills. To estimate economic benefits, BBC used EPA's projections of the amount of advanced coal-based generation equipped with CCS that would be added to the nation's generation mix under each of the two bills (65 GW and 100 GW, respectively). In addition, BBC estimated the employment and economic benefits of HR 6258, introduced by Rep. Rick Boucher in 2008 to provide funding support for the early commercial demonstration of

1 The BBC study is available at: http://www.boilermakers.org/resources/news/New_study_shows_advanced_coal_technology_will_create_jobs

CCS-equipped plants. BBC estimated the capacity to be installed under HR 6258 at approximately 3.2 Gigawatts (six 540 MW units).

Data from sources such as DOE/NETL and EPRI were incorporated into the IMPLAN model, an economic model developed by the U.S. Forest Service that is widely used for economic impact studies of this type. IMPLAN produced estimates of the jobs, output, value-added (GDP) and labor income associated with the construction and operation of advanced coal-based facilities equipped with CCS. BBC's findings are summarized below for the construction and operating phases of advanced coal facilities with CCS, showing total (direct, indirect and induced) job, output and income effects.

Construction Phase (Cumulative Benefits)

	100 GW	65 GW	Boucher
Job-Years	**6.9 Million**	**5.5 Million**	**225,000**
Output (Sales)	**$1.103 Trillion**	**$874 Billion**	**$33 Billion**
Labor Income	**$368 Billion**	**$297 Billion**	**$12 Billion**

Operating Phase (Annual Benefits)

	100 GW	65GW	Boucher
Job-Years	**251,200/yr**	**179,400/yr**	**7,500/yr**
Output (Sales)	**$58 Billion/yr**	**$41 Billion/yr**	**$2 Billion/yr**
Labor Income	**$17 Billion/yr**	**$12 Billion/yr**	**$500 Million/yr**

These estimates underscore the vital contribution that advanced coal-based facilities with CCS can make to our economy, while reducing greenhouse gases and creating significant new job opportunities. Notably, the incremental benefits of the 100 GW case, relative to the 65 GW case, are some 1.4 million job years of employment over a 4-5 year construction phase, $225 billion of gross output, and $90 billion in labor (household) income over the construction phase. During the operating phase, the incremental benefits of the 100 GW case are more than 70,000 permanent jobs, $17 billion of gross annual output, and $5 billion of annual labor income.

Concerns about GHG Performance Standards

Section 116 of ACES proposes new GHG emission performance standards for coal-based power plants, but not for other sources dependent on fossil fuels such as natural gas or oil. This section adds a new Section 812 to the Clean Air Act specifying greenhouse gas emission limitations for new coal plants, with emission rates linked to the dates of final permitting. The emission rates range from 1100 lbs CO2/MWh (~50% CO2 capture) for plants finally permitted by January 1, 2015, to 800 lbs CO2/MWh (~65% capture) for plants permitted by January 1, 2020. Plants permitted between January 1, 2009, but prior to 2015 are subject to an emission limit of 1100 lbs CO2/MWh dependent upon EPA determinations on the extent of operational CCS capacity in the U.S. and globally.

In addition to these provisions, Section 331 adds a new Section 811 to the CAA directing EPA to set GHG performance standards for stationary sources that are not subject to the bill's cap, and precluding the agency from setting GHG New Source Performance Standards for stationary sources subject to the cap.

The UMWA recommends that the Subcommittee avoid specifying performance standards limited to coal-based generating units subject to the cap. There is no basis for excluding new natural gas- or oil-based generating sources from Section 116, since all types of fossil generation ultimately would need to apply CCS technologies to comply with the bill's longer-term reduction requirements. More fundamentally, for capped sources, NSPS are unnecessary since all capped sources will be required to limit emissions through offsets or technology to comply with the bill's declining cap. The bill implicitly recognizes this by precluding EPA from setting NSPS for other capped stationary sources. In its present form, the bill appears to favor natural gas-based sources, which could comply with the cap for many years through low-cost offsets, while forcing coal plants to use CCS technology that has not yet been commercially demonstrated at the scales contemplated by the alternative "trigger" provisions. For these reasons, the UMWA respectfully suggests that only Section 331 of the bill's emission limitation provisions should be retained, providing for EPA determination of emission standards for uncapped stationary sources.

Support for IBEW-AEP Border Adjustment Proposal

ACES incorporates (at Section 411 *et seq*.) a modified version of the IBEW-AEP proposal for imposing allowance-based border adjustments on goods and products imported from countries that have not adopted comparable greenhouse gas controls. Changes to the proposal include delaying its start date to 2020, replacing the "comparability" test with a "competitiveness" test more likely to be challenged successfully under WTO, and transferring administrative authority and discretion over the program to the President rather than to an independent commission subject to judicial review.

These modifications weaken the prospective effect of the IBEW-AEP proposal, and reduce the pressure on China and other developing nations to adopt greenhouse gas controls. We are advised that the revisions substantially enhance the likelihood of successful challenges under WTO.

With China, India and other major developing economies unlikely to agree to any form of emission caps under the UN FCCC process, in Copenhagen this year - or for the foreseeable future - the U.S. should not limit its options for helping to create a level playing field in international commerce. At the 1992 Rio Earth Summit, there was no expectation that within less than 20 years China would emerge as the world's largest coal consumer, the dominant source of manufactured goods exported to the United States, and the largest emitter of greenhouse gases.

We recommend that the international border adjustment provisions of ACES be modified consistent with IBEW-AEP's suggested changes to the proposed bill submitted to the Committee on April 17th. Adoption of the IBEW-AEP suggested changes, including creation of an independent commission and elimination of a "competitiveness" test, will help to avoid WTO challenges.

Support for IBEW-UWUA Allocation Position

Critical decisions regarding the allocation and auction of emission allowances remain to be made. In principle, the UMWA favors the largest possible use of allowance allocations to the electric distribution and independent generation sectors, and to vulnerable manufacturing industries, with auctions reserved for use in upstream oil and gas. The UMWA supports the recommended approach to allocations outlined by USCAP and by the Edison Electric Institute, as reflected in the recent joint letter to Chairman Waxman and other members by the IBEW and the Utility Workers of America (Attachment 3).

The allocation of emission allowances downstream to electric utility "wires" companies will avoid the risk of windfall profits, while an appropriate allocation to independent generators in restructured states, sufficient to offset their compliance costs, will reduce the risk of large-scale switching from coal to natural gas. Auctions, in contrast, ensure that the costs of obtaining allowances would be passed through immediately to customers, increasing the cost of the program and

reducing public acceptance. The Title IV allowance allocation program, with bonus allowances for early adoption of technology, is a good example of how direct allocations can minimize customer costs while providing incentives for early use of control technologies.

Concerns about Timing and Stringency

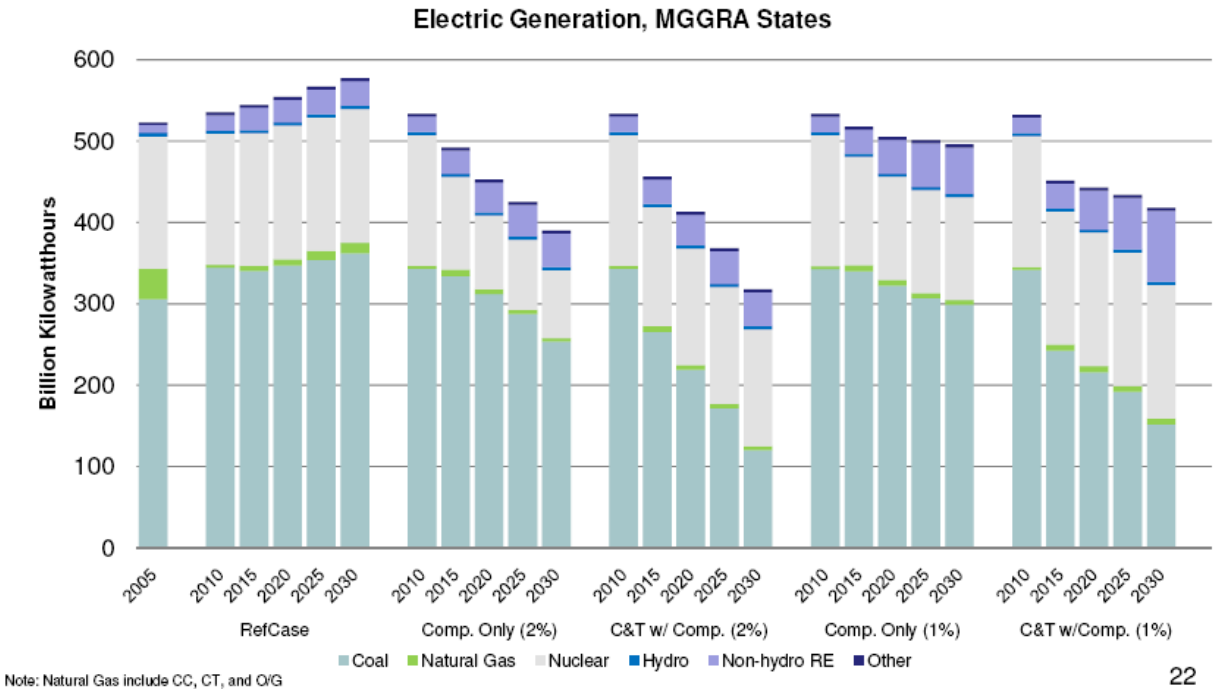
ACES proposes an aggressive schedule of greenhouse gas emission reductions that could lead to large-scale displacement of coal-based generation before CCS technologies can be adequately demonstrated for widespread commercial use. The UMWA is less concerned about the proposed reduction target of 42% below 2005 emissions by 2030 – assuming that CCS technologies can be widely deployed by that time - than by the 20% reduction target for 2020. This target is well above the 6% target proposed by the Dingell-Boucher December 2008 discussion draft and President Obama's proposed 14% target.

Any new power plant designed for CCS technologies and scheduled to be in commercial operation by 2020 should be in the design and permitting process today. ACES implicitly recognizes, both through its adoption of the Boucher Early CCS Demonstration Act, and its provisions calling for a study of long-term liability issues related to CCS, that commercial use of CCS by 2020 is likely to be limited to a handful of early-mover plants. The 2020 target should also recognize that the electric generation sector tends to bear the brunt of national emission

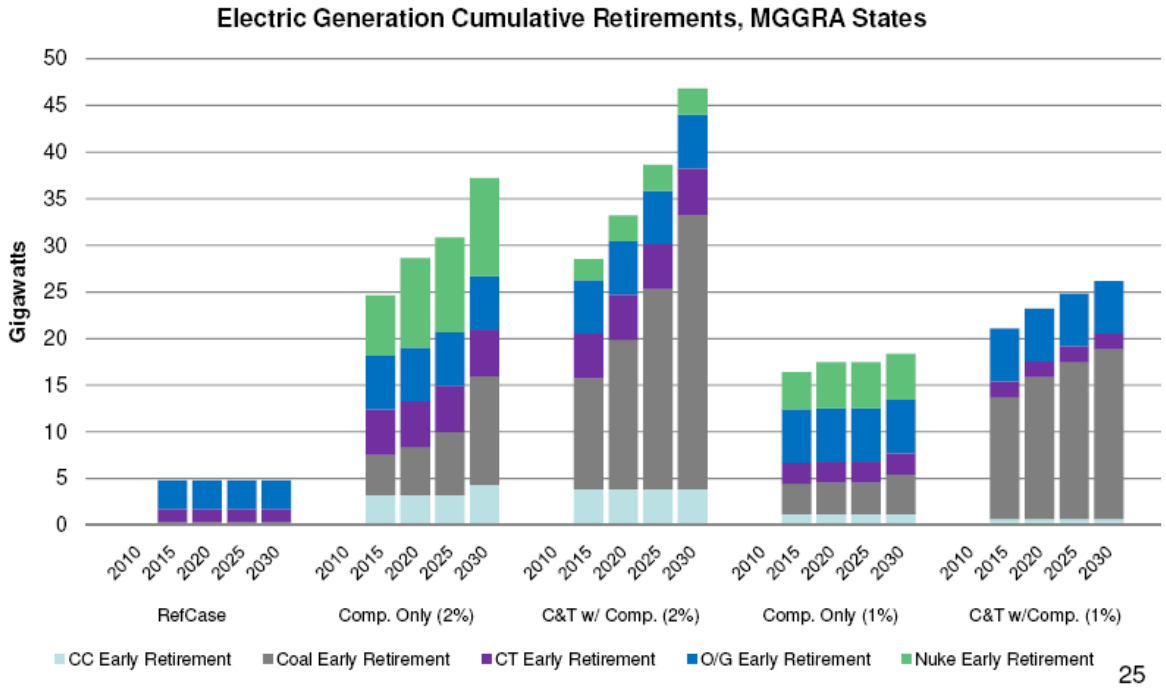
reductions in an economy-wide trading scheme, well in excess of its contributions to greenhouse gas emissions.

Recent modeling of emission control proposals being considered by the Midwest Greenhouse Gas Reduction Accord (MGGRA) process supports our concerns about the adverse consequences of an overly-aggressive 2020 target. The Midwest Governors' Accord stakeholder process has evaluated a package of policy options including a cap-and-trade program with a 20% reduction below 2005 levels by 2020, a long-term reduction target of 80% by 2050, and energy efficiency and renewable energy portfolio standards similar to those called for by ACES. The MGGRA region covers six signatory states: Minnesota, Iowa, Kansas, Illinois, Michigan and Wisconsin. Together, these states account for some 20% of U.S. GDP, and rely on coal for more than 60% of their electric generation.

The two charts below summarize the modeled impacts of the proposed cap and trade and complementary RPS and energy efficiency policies on electric generation and on the retirement of existing generating capacity in the six-state region. The energy efficiency targets are average annual reductions of 1% and 2% from baseline demand for the period 2015-2030.



Source: ICF, Inc., Cap-and-Trade Modeling: Initial Policy Run Results (March 27, 2009).



Source*: Id.*

The predominant impact of the MGGRA policies is the reduction of coal generation and the premature retirement of coal-based capacity. The coal unit retirements by 2030 range from 17 Gigawatts to 27 Gigawatts, or 30% to 50% of regional coal generating capacity of 55 Gigawatts. These unit retirements begin as early as 2015 and are more than half completed by 2020. In the lower case (1% energy efficiency), we estimate that more than 140 coal units – mainly smaller units less than 300 MW capacity and more than 50 years old - would be retired.

MGGRA modeling shows that most of this capacity would be replaced by wind energy. MGGRA has not undertaken transmission access or reliability analyses to assess the feasibility of this reduction of regional coal generation. We believe that similar concerns likely surround the impact of the 2020 target proposed in ACES.

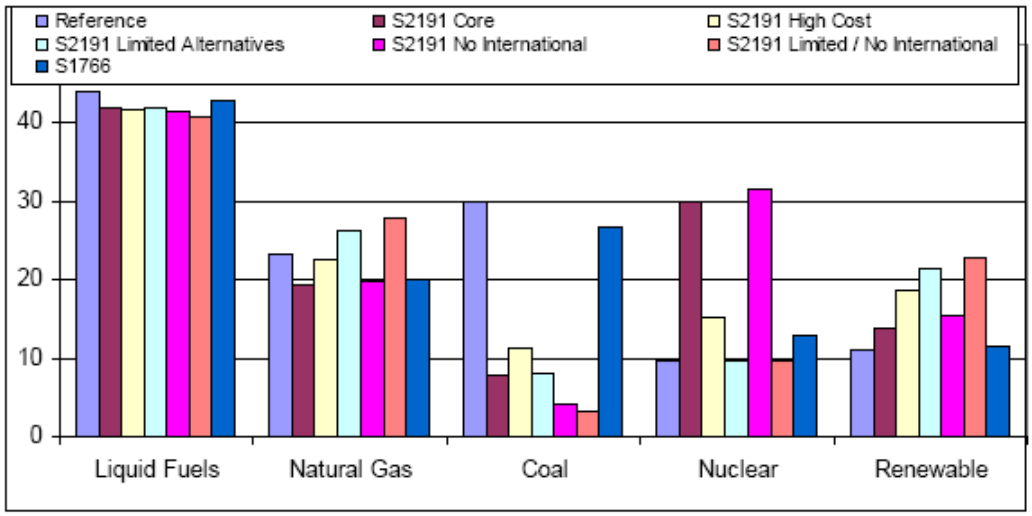
Similar coal market impacts have been predicted for legislation with 2020 emission targets less stringent than 20 percent. Analyses by U.S. EPA[2] and DOE/EIA[3] of the Lieberman-Warner bill indicate that U.S. coal production for electric generation would be curtailed sharply, mainly reflecting the low availability of CCS technology to meet the bill's target of a 15% reduction below 2005 emissions by 2020. The following EIA chart summarizes the bill's impacts

2 U.S. EPA, "Analysis of the Lieberman-Warner Climate Security Act of 2008 (March 14, 2008).

3 U.S. DOE, Energy Information Administration, "Energy Market and Economic Impacts of S. 2191, the Lieberman-Warner Climate Security Act of 2007 (April 2008).

on coal utilization in 2030 for alternative cases, including a comparison to the Bingaman-Specter bill (S. 1766):

Primary Energy Consumption by Fuel in 2030,
S. 2191 Cases and S. 1766 Update
(In quadrillion BTUs)



Source: DOE/EIA, n.3, Figure ES-1.

EIA's projection of a 65% reduction in coal use in the core case from 2006 levels underscores UMWA's concerns about the impacts of overly aggressive climate change targets and timetables when CCS is not commercially available on a widespread basis. EIA projects major increases in the demand for natural gas in the limited alternatives case, with adverse implications for other industries and consumers dependent on scarce gas resources. If EIA's core case assumptions about trebling nuclear power capacity by 2030 proved optimistic, utilities would have little choice but to switch from coal to natural gas on an unprecedented scale.

Sensitivity of Coal Impacts to 2020 Reduction Targets

On an economy-wide basis, reducing U.S. greenhouse gas emissions by 20% below 2005 levels by 2020 is equivalent to an emission reduction of nearly 1.2 billion tons of CO2-equivalent, based on current EIA emissions projections.4 The table below shows the total annual CO2-equivalent reductions associated with alternative 2020 economy-wide reduction targets below 2005 levels.

2020 Economy-wide CO2 reductions for alternative reduction targets

2020 Target Reduction (below 2005)	2020 CO2 Emissions (Mil tons)	2020 CO2 Reduction (Mil tons)
-6%	5,623	-359
-10%	5,384	-598
-14%	5,145	-837
-20%	4,786	-1,196

Absent widespread availability of CCS technologies for both new and retrofit applications by 2020, a significant portion of these emission reductions likely would be achieved by natural gas and renewable energy sources. If coal-based generation were retired and replaced in many regions by a combination of

4 U.S. DOE/EIA, Annual Energy Outlook 2009 (DOE/EIA-0383, March 2009), Table 18.

wind and natural gas generation,5 we estimate that each 100 million tons of CO2 reductions achieved in 2020 could displace approximately 158 million tons of coal to produce an equivalent amount of electrical generation. This means, in effect, that achieving a 2% reduction of overall U.S. CO2 emissions of 6.0 billion tons in 2020 could reduce projected coal use of 1.1 billion tons by 14 percent. This disproportionate effect results from the relative CO2 emission rates of natural gas generation and the availability of wind resources.

The UMWA therefore urges moderation in the choice of the 2020 target, recognizing that the majority of emission reductions required by ACES occur later in the program when technological advances should facilitate their implementation.

Support for Integration of State and Regional Climate Programs

A single national federal currency for allowance trading is essential to the operation of an efficient carbon market. Duplicative and overlapping state cap-and-trade programs could raise program costs while achieving no real environmental benefit.

ACES proposes limited preemption of the California and Northeast Regional Greenhouse Gas Initiative cap-and trade programs from 2012 until 2017. This

5 The estimated coal displacement is calculated assuming a combination of wind energy operating at 30% annual capacity factor (0 lbs CO2/MWh) and natural gas units (938 lbs CO2/MWh) operating at 70% capacity, to replace the generation associated with the estimated coal displacement (2,120 lbs CO2/MWh). Emission rates are based on 2005 data from EIA Forms 767 and 906.

period will be critical for developing the federal cap-and-trade allowance program. Avoiding the duplication of state CO2 cap-and-trade programs will not impede continued state climate change initiatives focused on other source sectors. The proposed mechanism (Section 790) for compensating California and RGGI allowance holders through exchanges of federal allowances appears fair because it makes these parties "whole" for their allowance transactions made prior to 2011.

The UMWA supports efforts to provide uniform national rules for allowance allocations and trading without the risk of duplicative state cap-and-trade regulation. ACES provides that states will be entitled to participate in the State Energy and Environment Development Fund (SEED) program established by Subtitle D (Sections 131 et seq.), consolidating a variety of federal funding programs to enhance energy efficiency, promote renewable energy sources, and the like. The energy efficiency and related investments made possible through SEED will facilitate achieving ACES's ultimate emission reduction objectives.

Conclusion

The UMWA thanks the Chairmen, the Ranking Members, and the Committee and Subcommittee for their consideration of its views.

Attachment 1

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Mr. Trisko has a B.A. in economics and politics from New York University (1972) and a J.D. degree from Georgetown University Law Center (1977). He is admitted in the District of Columbia, and has appeared before the U.S. Court of Appeals for the D.C. Circuit in matters concerning the Clean Air Act. He has lectured on the Clean Air Act and climate change at The Pennsylvania State University, the University of Virginia, and West Virginia University College of Law.

Mr. Trisko was active on behalf of the United Mine Workers of America in the reauthorization of the 1990 Clean Air Act Amendments. He has participated as an NGO on behalf of the UMWA in all United Nations climate change negotiating sessions since the 1992 Rio Earth Summit. In 2006 and 2007, he represented the UMWA in mercury proceedings in Pennsylvania, and in the Illinois Climate Change Advisory Group. He currently represents the Illinois AFL-CIO, the UMWA and IBEW local unions in the Midwest Governors' Association climate initiative.

Mr. Trisko is a member of U.S. EPA's Clean Air Act Advisory Committee. He served on EPA's Mercury MACT Work Group from 2003 to 2005, and on the Advanced Coal Technology Working Group in 2007-08. In 2000 and again in 2007, he was appointed by the U.S. Department of State to represent U.S. labor and stationary source interests as a member of the U.S. Delegation in bilateral air quality negotiations with Canada.

Mr. Trisko is the author of more than 20 articles on energy, climate and clean air policy issues published in environmental and law journals. Before entering private practice, he served as an attorney with the Federal Trade Commission, and as an energy economist with Robert R. Nathan Associates. He has appeared as an expert witness on utility cost of capital before several state public service commissions.

Attachment 2

Summary Statement of Eugene M. Trisko on behalf of the United Mine Workers of America, AFL-CIO April 23, 2009

I am pleased to be here today to testify on behalf of the United Mine Workers of America (UMWA) to discuss the proposed American Clean Energy and Security Act of 2009.

The UMWA supports national climate change legislation. The UMWA is mindful, however, that imprudent climate change legislation potentially represents the greatest threat to its membership and to the continued use of coal.

Coal is an indispensable part of America's energy supply. Twenty three states rely on coal for more than half of their electric supplies, while another 12 states receive 25% to 50% of their electricity from coal More than one-half of our nation's electricity is generated by coal, principally in baseload plants. Renewable energy alone cannot replace coal's role in baseload power.

Section 114 of ACES provides an essential foundation for national climate change legislation by establishing a secure, non-budget source of financing for demonstrating the technical and commercial feasibility of carbon capture and storage (CCS) technologies. CCS technologies are the only means for assuring that domestic coal can continue to supply the majority of our electric generating needs in a carbon-constrained environment.

The UMWA supports the CCS incentives provided in section 115 of ACES. A financial mechanism is needed to defray the incremental capital and operating costs of CCS technologies relative to units not employing carbon controls. Section 115 depends on appropriated funds to be distributed by EPA. We recommend an allowance-based mechanism for funding 65 to 100 Gigawatts of CCS-equipped facilities, similar to the bonus allowance provisions of the Bingaman-Specter (S. 1766) or Warner-Lieberman (S. 2191) bills. We agree with the principle that larger payments should be awarded to projects achieving higher degrees of carbon capture and storage. A recent analysis by BBC Research & Consulting indicates that commercial deployment of 65 to 100 GW of CCS-based advanced generating capacity could create 5 to 7 million job-years of employment during the construction phase, and 179,000 to 251,000 permanent jobs during operations.

The Subcommittee should avoid specifying CO2 performance standards, or limiting these standards to coal-based generating units. There is no basis for excluding other fossil-based generating sources from Section 116, since all types of fossil generation ultimately would need to apply CCS technologies to comply with the bill's longer-term reduction requirements. The proposed standards are unnecessary since all capped sources will be required to limit emissions through offsets or technology to comply with the bill's declining cap.

The UMWA is mainly concerned about the 20% reduction target for 2020. ACES implicitly recognizes, both through Section 114 and its provisions for a study of long-term liability issues, that commercial use of CCS by 2020 is likely to be limited to a handful of early-mover plants. The 2020 target should recognize that the electric generation sector will bear the brunt of national emission reductions. Recent modeling of similar emission control, energy efficiency and renewable energy proposals for the Midwest Governors Association shows that the region could lose one-third to one-half of its coal-based generating capacity between 2015 and 2030. Such impacts must be avoided if the nation is to retain domestic coal as a principal source of reliable electric power, and avoid a large-scale conversion to natural gas. The UMWA therefore urges moderation in the choice of the 2020 target, recognizing that the majority of emission reductions required by ACES occur later in the program when technological advances should facilitate their implementation.

Attachment 3

March 27, 2009

The Honorable Barbara Boxer
Chair
Senate Environment and Public Works Committee
410 Senate Dirksen Office Building
Washington, DC 20510

The Honorable Henry Waxman
Chair
House Energy and Commerce Committee
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Jeff Bingaman
Chair
Senate Energy and Natural Resource Committee
304 Senate Dirksen Building
Washington, DC 20510

The Honorable Ed Markey
Chair
House Energy and Environment Sub-Committee
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Max Baucus
Chair
Senate Finance Committee
219 Dirksen Senate Office Building
Washington, DC 20515

The Honorable Charles Rangel
Chair
House Ways and Means Committee
1102 Longworth House Office Building
Washington, DC 20515

Dear Senators and Congressmen:

Last November we wrote you on behalf of our respective labor unions to express support for balanced, comprehensive legislation to reduce greenhouse gas emissions. We also expressed our strong opinion that emission allowances be allocated, not auctioned, under a cap-and-trade program. Our concern that workers in impacted industries not be adversely affected has become even greater as the economic down-turn has deepened.

We're aware that some economists claim that auctioning allowances would be more efficient than administrative allocations to affected industries. Others who support a large or total auction are attracted by the financial proceeds such an auction would yield. We strongly disagree that auctioning off allowances, particularly in the early phases of a cap-and-trade program, would be best for our nation's energy supply or consumers. We believe an allocation scheme much like that in the successful Clean Air Act acid rain program would greatly mitigate impact on consumers and minimize disruption of our economy and workers. This allocation method has been extremely successful in achieving emission reduction goals at the lowest cost to consumers.

Much has changed since November. The economic slump is severe and appears to be long-lived. Also, two organizations – Edison Electric Institute (EEI) and the United States Climate Action Partnership (USCAP) – each issued principles on cap-and-trade legislation after considerable deliberation. We note with interest that each recommends allocating allowances for the electricity sector to distribution utilities *and* to merchant coal generators who are unregulated, competitive power producers from which utilities in some states purchase electricity for their customers.

In our letter, we recommended allocating all allowances for the electricity sector to distribution companies rather than generators. For regulated electric power markets, where fully integrated utilities own both generation and distribution under state regulation, this approach is sound. However, both the EEI and USCAP proposals recognize the importance of merchant coal generators to consumers in unregulated markets and advocate allocations to cover only their "net compliance costs" over some reasonable transition period until replacement or retrofit technology develops.

We realize the importance of merchant coal generators to our electricity supply as we transition to low-or-zero carbon alternatives. About half of our nation's electricity is produced from coal and about one fourth of that is provided by competitive or merchant generators who sell their output to regulated utilities and their customers. Without allowances, those generators would be forced to retire prematurely early in the transition, which costs all consumers and jeopardizes the system's reliability. Any potential of "windfall profits" for such generators can be addressed by restricting the quantity of allocated allowances to only the amount necessary to cover net compliance costs (defined as incurred allowance cost minus increased wholesale electricity prices).

We urge you to recognize the significant differences in market structures that exist for coal-fired generators in the United States as you deliberate the most effective and efficient way to address greenhouse gas emission allowance allocations. Market-specific allocation schemes will be required to ensure equitable protection to all union members and consumers.

Sincerely,

Edwin D. Hill
International President
IBEW

D. Michael Langford
President
UWUA

/ceb
Copy to President Barack Obama
All Members of United States Congress